

Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims:

1. (Original) A method of inducing tolerance to a therapeutic cell in a patient who is to be administered subsequently a therapeutic amount of the said therapeutic cell or a precursor thereof, the method comprising administering to the patient (a) a tolerising cell sharing the same antigenic characteristics as the therapeutic cell, or an antigen found thereon or a derivative of said antigen, and (b) an agent which raises the effective cAMP concentration in a monocyte cell.

2. (Original) A method of reducing the risk of rejection of a transplant in a patient in need of transplantation of a therapeutic cell for cell or tissue regeneration, the method comprising administering to the patient prior to the transplant (a) a tolerising cell sharing the same antigenic characteristics as the therapeutic cell which therapeutic cell is, or is able to differentiate into, the cell or tissue to be regenerated, or an antigen found thereon or a derivative of said antigen, and (b) an agent which raises the effective cAMP concentration in a monocyte cell.

3. (Currently amended) A method of treating a patient in need of cell or tissue regeneration, the method comprising administering to the patient (a) a tolerising cell sharing the same antigenic characteristics as the a therapeutic cell to be administered subsequently which therapeutic cell is, or is able to differentiate into, the cell or tissue to be regenerated, or an antigen found thereon or a derivative of said antigen, (b) an agent which raises the effective cAMP concentration in a monocyte cell in an amount to induce tolerance to the said therapeutic cell, and subsequently administering to the patient (c) a therapeutic amount of the said therapeutic cell.

4. (Original) A method according to Claim 3 wherein in step (a) a cell is administered to the patient.

5. (Original) A method according to Claim 4 wherein the tolerising cell in step (a) and the therapeutic cell in step (c) are derived from the same parent embryonic stem cell.

6. (Currently amended) A method according to claim 1 ~~any one of claims 1 to 5~~ wherein the patient is additionally administered granulocyte-macrophage colony stimulating factor (GMCSF) or a derivative thereof.

7. (Currently amended) A method according to claim 3 ~~any one of the preceding claims~~ wherein the patient is suffering from a degenerative disease or disorder.

8. (Original) A method according to Claim 7 wherein the degenerative disease or disorder is selected from the group consisting of diabetes, stroke, Parkinson's disease, ALS (Lou Gehrig's disease), spinal cord injury, heart attack, cardiac ischaemia, congestive heart failure, hepatitis, cirrhosis, cancer, immunodeficiency, osteoporosis, osteoarthritis, macular degeneration, burn, wounds, muscular dystrophy and multiple sclerosis.

9. (Currently amended) A method according to claim 1 ~~any one of the preceding claims~~ wherein (a) the tolerising cell or an antigen found thereon or a derivative of said antigen, and (b) the agent which raises the effective cAMP concentration in a monocyte cell are administered together.

10. (Original) A method according to Claim 9 wherein GMCSF is administered at the same time as (a) the tolerising cell, or an antigen found thereon or a derivative of said antigen, and (b) the agent which raises the effective cAMP concentration in a monocyte cell.

11. (Currently amended) A method according to claim 1 ~~any one of Claims 1 to 10~~ wherein (a) the tolerising cell or an antigen found thereon or a derivative of said antigen is administered after administration of (b) the agent which raises the effective cAMP concentration in a monocyte cell and, if used, ~~the~~ GMCSF or a derivative thereof.

12-24 (Canceled)

25. (Currently amended) A composition for inducing tolerance to a therapeutic cell in a patient who is to be administered subsequently a therapeutic amount of the said therapeutic cell or a precursor thereof, the composition comprising (a) a tolerising cell sharing the same antigenic characteristics as the therapeutic cell, or an antigen found thereon or a derivative of said antigen, (b) an agent which raises the effective cAMP concentration in a monocyte cell, and optionally, (c) granulocyte-macrophage colony stimulating factor (GMCSF) or a derivative thereof.

26. (Currently amended) A therapeutic system for inducing tolerance to a therapeutic cell in a patient who is to be administered subsequently a therapeutic amount of the said therapeutic cell or a precursor thereof, the therapeutic system comprising (a) a tolerising cell sharing the same antigenic characteristics as the therapeutic cell, or an antigen found thereon or a derivative of said antigen, (b) an agent which raises the effective cAMP concentration in a monocyte cell, and optionally, (c) granulocyte-macrophage colony stimulating factor (GMCSF) or a derivative thereof.

27. (Currently amended) A kit of parts for inducing tolerance to a therapeutic cell in a patient who is to be administered subsequently a therapeutic amount of the said therapeutic cell or a precursor thereof, the kit comprising (a) a tolerising cell sharing the same antigenic characteristics as the therapeutic cell, or an antigen found thereon or a derivative of said antigen, (b) an agent which raises the effective cAMP concentration in a monocyte cell, and optionally, (c) granulocyte-macrophage colony stimulating factor (GMCSF) or a derivative thereof.

28. (Currently amended) A method according to claim 1 ~~any of Claims 1 to 11, a use according to any of Claims 11 to 24, a composition according to Claim 25 a therapeutic system according to Claim 26 or a kit of parts according to Claim 27~~ wherein the agent which raises the effective cAMP concentration in a monocyte cell is any one or more of a prostaglandin or agonist thereof, a β -adrenergic agent, a blocker of cAMP export from the cell, forskolin or a derivative thereof, a cAMP phosphodiesterase inhibitor, a cAMP analogue, or cholera toxin or a derivative or fragment thereof.

29. (Currently amended) A method ~~or use or composition or therapeutic system or kit of parts~~ according to Claim 28 wherein the blocker of cAMP export from the cell is probenidol or progesterone.

30. (Currently amended) A method ~~or use or composition or therapeutic system or kit of parts~~ according to Claim 28 wherein the cAMP analogue is Sp-adenosine cyclic 3', 5'-cyclic monophosphorothioate or 8-bromoadenosine 3', 5' monophosphate or dibutyryl cAMP.

31. (Currently amended) A method ~~or use or composition or therapeutic system or kit of parts~~ according to Claim 28 wherein the prostaglandin or agonist thereof stimulates cAMP production in a monocyte.

32. (Currently amended) A method ~~or use or composition or therapeutic system or kit of parts~~ according to Claim 28 ~~or 31~~ wherein the prostaglandin or agonist thereof is any one of a prostaglandin E, ~~such as prostaglandin E₂ or an analogue thereof~~, dinoprostone, gemeprost, misoprostol, alprostadil, limaprost, butaprost, 11-deoxy PGE1, AH23848, AH13205, or a 19-hydroxy PGE.

33. (Currently amended) A method according to Claim 6 ~~or a use according to any of Claims 15 or 19 or 23 or a composition according to Claim 25 or a therapeutic system according to Claim 26 or a kit of parts according to Claim 27~~ wherein the GMCSF, ~~if present~~, is human GMCSF having the amino acid sequence as defined in Figure 1, or naturally occurring variants thereof.

34. (Currently amended) A method ~~or use or composition or therapeutic system or kit of parts~~ according to Claim 33 wherein the GMCSF is sargramostim.

35. (Currently amended) A method according to claim 1 ~~any of Claims 1 to 11~~ comprising administering a monocyte chemotactic agent to the patient.

36. (Original) A method according to Claim 35 wherein the monocyte chemotactic agent is MCP-1 or MIP-1 α .

37. (Currently amended) A method according to claim 1 ~~further any of Claims 1 to 11~~ comprising administering a PDE inhibitor to the patient.

38. (Currently amended) A method ~~or use or composition or therapeutic system or kit of parts~~ according to Claim 28 wherein the PDE inhibitor is any one of 3-isobutyl-1-methylxanthine (IBMX), pentoxifylline (3,7-dihydro-3,7-dimethyl-1-(5-oxohexyl)-1H-purine-2,6-dione), rolipram (4-[3-cyclopentyloxy-4-methoxyphenyl]-2-pyrrolidinone), CP80 633, CP102 995, CP76 593, Ro-20- 1724 (4-[3-butoxy-4-methoxybenzyl]-2-imidazolidinone), theophylline, or denbufylline (1,3-di-n-butyl-7-(2-oxopropyl)-xanthine).

39. (Currently amended) A method ~~or use or composition or therapeutic system or kit of parts~~ according to Claim 38 wherein the PDE inhibitor is selective for type IV PDE.

40. (Currently amended) A method ~~or use or composition or therapeutic system or kit of parts~~ according to Claim 39 wherein the PDE inhibitor selective for type IV

PDE is any one of rolipram (4-[3-cyclopentyloxy-4-methoxyphenyl]-2-pyrrolidinone), CP80 633, CP102 995, CP76 593, Ro-20-1724 (4-[3-butoxy-4-methoxybenzyl]-2-imidazolidinone), denbufylline (1,3-di-n-butyl-7-(2-oxopropyl)-xanthine, or CDP840, RP73401 or RS33793.

41. (Original) A pharmaceutical composition comprising the composition according to Claim 25 and a pharmaceutically acceptable carrier, diluent or excipient.

42. (Canceled)

43. (Currently amended) A therapeutic system according to Claim 26 ~~or a kit of parts according to Claim 27~~ further comprising a therapeutic cell which is, or is able to differentiate into, a cell or tissue to be regenerated.

44-45 (Canceled)

46. (New) A composition according to claim 25 wherein the agent which raises the effective cAMP concentration in a monocyte cell is any one or more of a prostaglandin or agonist thereof, a β -adrenergic agent, a blocker of cAMP export from the cell, forskolin or a derivative thereof, a cAMP phosphodiesterase inhibitor, a cAMP analogue, or cholera toxin or a derivative or fragment thereof.

47. (New) A therapeutic system according to claim 26 wherein the agent which raises the effective cAMP concentration in a monocyte cell is any one or more of a prostaglandin or agonist thereof, a β -adrenergic agent, a blocker of cAMP export from the cell, forskolin or a derivative thereof, a cAMP phosphodiesterase inhibitor, a cAMP analogue, or cholera toxin or a derivative or fragment thereof.

48. (New) A kit of parts according to claim 27 wherein the agent which raises the effective cAMP concentration in a monocyte cell is any one or more of a prostaglandin or agonist thereof, a β -adrenergic agent, a blocker of cAMP export from the cell, forskolin or a derivative thereof, a cAMP phosphodiesterase inhibitor, a cAMP analogue, or cholera toxin or a derivative or fragment thereof.

49. (New) A kit of parts according to claim 27 further comprising a therapeutic cell which is, or is able to differentiate into, a cell or tissue to be regenerated.

50. (New) A composition according to claim 25 wherein the GMCSF is present and is a human GMCSF having the amino acid sequence as defined in Figure 1, or naturally occurring variants thereof.

51. (New) A therapeutic system according to claim 26 wherein the GMCSF is present and is a human GMCSF having the amino acid sequence as defined in Figure 1, or naturally occurring variants thereof.

52. (New) A kit of parts according to claim 27 wherein the GMCSF is present and is a human GMCSF having the amino acid sequence as defined in Figure 1, or naturally occurring variants thereof.